

## CLAIMS

1. A sensor-equipped antifriction bearing unit comprising an antifriction bearing having an outer ring member and an inner ring member, and a resolver for detecting the 5 rotation of a shaft, one of the outer ring member and the inner ring member being provided with a stator of the resolver, the other ring member being provided at a position opposed to the stator with a face to be detected and formed by machining for use as a rotor of the resolver.
- 10 2. A sensor-equipped antifriction bearing unit according to claim 1 wherein the face of the rotor to be detected is in the form of a cylindrical face eccentric with respect to a cylindrical surface centered about an axis of the antifriction bearing.
- 15 3. A sensor-equipped antifriction bearing unit according to claim 1 wherein the face of the rotor to be detected is in the form of a cylindrical face centered about an axis of the antifriction bearing and having a cutout.
- 20 4. A sensor-equipped antifriction bearing unit according to claim 1 wherein the antifriction bearing is a double-row bearing, and the stator is disposed at an intermediate portion between two rows of rolling bodies.
- 25 5. A sensor-equipped antifriction bearing unit according to claim 1 wherein the resolver is a VR-type resolver.
6. A sensor-equipped antifriction bearing unit according to claim 1 wherein the inner ring member is a rotation-side raceway member having a flange for attaching a wheel thereto and to be provided with the wheel, and the outer ring member is a stationary-side raceway member having a

portion to be attached to a vehicle body side and mountable on a vehicle body.

7. A sensor-equipped antifriction bearing unit according to claim 6 wherein the rotation-side raceway member 5 comprises a shaft composed of a large-diameter portion having a first raceway and a small-diameter portion having an outside diameter smaller than the diameter of the first raceway, and a ring having a second raceway and fitted around the small-diameter portion of the shaft.

10 8. A sensor-equipped antifriction bearing unit according to claim 7 wherein the stator is disposed at an end portion of the stationary-side raceway member opposed to a shoulder portion of the ring of the rotation-side raceway member, and the face of the rotor to be detected is formed on 15 an outer periphery of the shoulder portion of the ring.

9. A sensor-equipped antifriction bearing unit according to claim 8 wherein wiring for the stator extends to the outside through an opening in the end portion of the stationary-side raceway member in the form of a hollow cylinder, 20 and a hollow cylindrical cover having a bottom is provided over the end portion opening of the stationary-side raceway member, the cover having at the bottom thereof a connector member to be provided with a signal transmission harness.

10. A sensor-equipped antifriction bearing unit 25 according to claim 9 wherein the stator is fixed to the cover, and the cover is fixed to the stationary-side raceway member.

11. A sensor-equipped antifriction bearing unit according to claim 9 wherein a wiring member including a lead wire and a connector pin is fixedly embedded in a resin filling

interior thereof.